

AMENDMENTS TO THE CLAIMS

Please amend the claims as indicated in the following listing of all claims:

1. (Currently amended) An electrical assembly comprising:
traces extending toward respective off-assembly connections; and
structures defined along the traces to induce compensating crosstalk signals having an
opposing polarity which opposes initial crosstalk signals that are associated with
mutual coupling between adjacent off-assembly connections, wherein one or more
of the ~~integrated transformer~~ structures each comprises an aperture in a voltage
plane of the electrical assembly and portions of the traces that are essentially
parallel to each other and which traverse a respective aperture.

2. (Original) The electrical assembly of claim 1, wherein said portions of the traces pass
over or under the respective aperture.

3. (Original) The electrical assembly of claim 1, wherein the said portions of the traces
are coplanar with the voltage plane.

4. (Original) The electrical assembly of claim 1, further comprising:
the off-assembly connections.

5. (Original) The electrical assembly of claim 1, including a semiconductor package,
wherein the off-assembly connections include pins, solder connections, leads, or wires;
and
wherein the traces are formed on the semiconductor package.

6. (Original) The electrical assembly of claim 1, including a board or card,
wherein the off-assembly connections include pins or leads of a semiconductor package
or solder connections or wires thereto; and
wherein the traces are formed on the board or card.

7. (Original) The electrical assembly of claim 1, including a board or card, wherein the off-assembly connections include pins, leads, solder connections or edge connectors; and wherein the traces are formed on the board or card.
8. (Original) The electrical assembly of claim 1, including a semiconductor package, wherein the off-assembly connections include pins, solder connections, leads, or wires.
9. (Original) The electrical assembly of claim 1, wherein the traces and the off-assembly connections are on opposing sides of the electrical assembly; and wherein an electrical connection is provided between a trace and a respective off-assembly connection.
10. (Original) The electrical assembly of claim 1, wherein the off-assembly connections are organized as an array; and wherein said adjacent off-assembly connections are nearest off-assembly connections.
11. (Previously Presented) The electrical assembly of claim 10, wherein the array is linear; wherein for each off-assembly connection, there are two nearest off-assembly connections; and wherein, for essentially each of the traces, there are two structures defined therealong to induce compensating crosstalk signals to oppose respective initial crosstalk signals introduced by each of said two nearest off-assembly connections.
12. (Original) The electrical assembly of claim 1, wherein the off-assembly connections include one of pins, solder joints, leads, and wires.
13. (Original) The electrical assembly of claim 1, wherein the electrical assembly includes an integrated circuit chip.

14. (Original) The electrical assembly of claim 1, wherein the electrical assembly includes a chip carrier or package.

15. (Original) The electrical assembly of claim 1, wherein the electrical assembly includes a board or card.

16-22. Cancelled.

23. (Previously presented) An electrical assembly comprising:
at least a portion of a crosstalk compensation circuit defined thereon for offsetting an original crosstalk signal induced at a first off-assembly connection by one or more signals on one or more adjacent off-assembly connections; and
electrical traces traversing apertures defined in one or more voltage planes of the assembly to inductively couple compensating crosstalk signals having opposing polarity to the original crosstalk signal.

24. (Previously presented) The electrical assembly of claim 23, wherein the electrical traces are respectively coupled to the first and adjacent connections.

25. (Previously presented) An electrical assembly comprising:
traces extending toward respective off-assembly connections; and
means defined along the traces for inducing compensating crosstalk signals having opposing polarity to initial crosstalk signals associated with mutual coupling between adjacent of the off-assembly connections.

26. (Currently amended) The electrical assembly of claim 25, wherein the means for inducing compensating crosstalk signals include:
an aperture in a voltage plane of the electrical assembly; and
essentially parallel portions of a ~~correspond~~ corresponding pair of the traces, the essentially parallel portions coplanar with the voltage plane and traversing the aperture therein.

27. (Previously Presented) The electrical assembly of claim 25, wherein the means for inducing compensating crosstalk signals include inductive structures defined along the traces.

28. (Previously presented) The electrical assembly of claim 25, wherein the means for inducing compensating crosstalk signals define at least a portion of a crosstalk compensation circuit.

29. (Previously presented) An electrical assembly comprising:
traces extending toward respective off-assembly connections; and
essentially parallel portions of the traces traversing apertures defined in one or more
voltage planes of the assembly to inductively couple compensating crosstalk
signals having opposing polarity to an original crosstalk signal.

30. (Previously Presented) The electrical assembly of claim 29, wherein the aperture traversing portions of the traces at least partially define integrated, coplanar inductive structures.